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The UPM Market Informer

Monthly Intelligence for Customers of United Performance Metals

Price Increase Notices



Effective with shipments beginning September 1, 2017, Outokumpu Coil Americas and North American Stainless (NAS) will implement the following price increase: Cold Rolled 200, 300, & 400 Series will have their discount reduced by 2 points. CMP base pricing will be increased by .03/pound. Polish functional discounts will be reduced 10 points. In addition, ATI Flat Rolled Products will reduce the functional discount by 2% for ATI 430™, 200 and 300 series cold rolled sheet.

AK Steel Holding Corporation announced that it will raise the current spot market base prices for all carbon flat-rolled steel products by a minimum of \$30 per ton. The price hike is effective immediately with new orders.

Despite Delay, U.S. Expected to Impose Steel Tariffs

U. S. President Donald Trump is still expected to impose steel import tariffs on national security grounds despite the delay of a probe into the matter and pursuit of multilateral talks to reduce excess capacity, industry players and trade experts say. U.S. steel stocks .SPCOMSTEEL have fallen nearly 10% since Trump delayed the release of the so-called "Section 232" review of the U.S. steel industry last month, partly reflecting fears that his promises to protect the industry may not materialize. But industry analysts say the falls might be overdone, and there is reason to think that import relief may still happen.

"Based on (Commerce Secretary Wilbur) Ross' recent statements and our discussions with trade lawyers engaged in Section 232, we still expect measures that will have positive impact on U.S. steel prices," said Seth Rosenfeld, a steel industry analyst at Jeffries in London. "The most likely outcome is tariff rate quotas where the level of tariff changes dependent on the volume of imports. This structure serves as something of an upside cap on steel pricing so they do not get out of control," Rosenfeld added.

Trump launched the probe into whether steel imports compromise U.S. national security in April, boosting U.S. steel stocks, but said in July a final decision might have to wait until other top-priority issues are addressed. Ross said he would defer to Trump's lead and also cited multi-lateral talks to reduce capacity, fueling concern in the steel industry that the "232" review, initially scheduled to conclude in late June, might be scrapped or substantially watered down.



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Steel Tariffs, *Continued*

The Trump administration official told Reuters, however, that the steel probe remains active and “is still under the final stages of review within the administration”. He declined to comment on the possible timing of its release. By law, Ross has until mid-January 2018 to conclude his review. Trump would then have 90 days to react. “Our hope and expectation is that there would be action on (Section 232) sooner, rather than going the full time,” said Tom Gibson, president and CEO of the American Iron and Steel Institute.



In a sign that some market players still anticipate a U.S. tariff move, steel import permit applications fell 12% in July from June, making up 28% of the market, according to U.S. Commerce Department data compiled by AISI. Trump’s planned steel restrictions are mostly aimed at persuading China, producer of more than half of the world’s steel, to cut excess production capacity, but direct imports from China into the U.S. have already fallen dramatically due to previous anti-dumping and anti-subsidy duties.

Instead, critics say broad new steel restrictions would hit U.S. allies such as South Korea, Japan, Germany and Turkey much harder, prompting warnings of retaliations against unrelated U.S. products. Diplomats also say “232” duties risk undermining the global trading system if national security becomes an accepted excuse to erect trade barriers. Trump during his election campaign promises supporters in rust-belt states such as Pennsylvania and Ohio that he would restore steel and coal jobs. U.S.-based trade analysts say Trump may still turn to steel import restrictions because he can invoke them without congressional approval after suffering recent legislative setbacks. The steel investigation has also been caught up in Trump’s efforts to secure China’s cooperation to impose sanctions on North Korea. Trump has promised easier trade terms to Beijing if China helps rein in North Korea’s nuclear and missile testing. *Source: Reuters*

Cyber Attacks on Manufacturing Industry Continue to Rise

- Cyber attacks were up 24% globally during Q2 2017
- Manufacturers continue to be a key target for cybercriminals
- 67% of malware attacks were delivered by phishing emails
- The speed of attacks continues to increase exponentially once proof of concept code is released

The frequency and sophistication of cyber attacks continues to rise globally according to research data in the Q2 Threat Intelligence Report released by NTT Security. The manufacturing industry was the most heavily targeted industry across NTT Security clients during Q2 ‘17, accounting for 34% of attack activity. It was also heavily targeted across NTT Security client networks 2016, appearing in the ‘top three’ in five of the six geographic regions. No other industry appeared in the top three more than twice.

- 58% of malware distribution in manufacturing environments was via web-based downloads
- 86% of malware in the manufacturing industry were variants of Trojans and droppers
- Reconnaissance accounted for 33% of all activity aimed at manufacturing clients in Q2 ‘17

“The motivations for these attacks are often criminal in nature, including extortion via ransomware, industrial espionage, and theft of data such as account numbers. What poses an even greater problem is that when these breaches are successful, yet go undetected, they allow hackers to establish footholds in organizations’ networks where they have free reign to wreak havoc over extended periods. This is a problem if we consider that 37% of manufacturers recently surveyed, indicated they do not have an incident response plan in place. This is very concerning as manufacturer’ IT security liabilities often impacted not just the manufacturing organizations, but suppliers, as well as related industries and consumers,” said Jon Heimerl, Manager, Threat Intelligence Communication Team, NTT Security. *Source: Help Net Security*



LME Nickel Price Soars to 2017 High

The three-month nickel price on the London Metal Exchange hit its highest level so far this year on Monday, August 21 at \$11,270 per ton, with the rise attributed to stronger demand from the stainless steel and battery sectors and environmental controls affecting supply in China.

“Unexpectedly better consumption of nickel in the stainless steel and battery sectors in the third quarter is the key driving force in the nickel price rally,” China Merchant Futures senior nickel analyst Xia Peng said.

The production of 300 series stainless steel normally accounts for half of China’s total stainless steel output. Also known as austenitic stainless steel, it contains more nickel than 200 series and 400 series steel.

In addition to increasing demand for nickel from a robust stainless steel sector, nickel consumption in the battery sector has drawn much attention from investors recently.

“Growing electric vehicle production and battery storage deployment in the coming years will lead to an oversupplied global market, which will eventually tighten, as nickel remains an important component of batteries moving forward,” BMI Research said in its report on August 18. Moreover, on the supply side, Chinese environmental inspectors are restricting the resumption of nickel pig iron (NPI), despite the higher nickel price. *Source: AMM.COM*



Surcharge Totals June-November 2017

Grades	June	July	Aug	Sep	Oct	Nov
15-5	0.4524	0.3736	0.3811	0.4123	*	*
15-7	0.5774	0.4705	0.4740	0.5387	*	*
17-4	0.4582	0.3750	0.3822	0.4118	*	*
17-7	0.5031	0.4034	0.4142	0.4599	*	*
201	0.4526	0.3632	0.3716	0.4015	*	*
301 7.0%	0.5103	0.4011	0.4116	0.4561	*	*
302/304/304L	0.5403	0.4325	0.4446	0.4948	*	*
304-8.5%	0.5529	0.4443	0.4571	0.5103	*	*
305	0.6476	0.5308	0.5488	0.6224	*	*
309	0.6940	0.5587	0.5767	0.6502	*	*
310	0.8965	0.7395	0.7681	0.8823	*	*
316/316L	0.6921	0.5689	0.5777	0.6627	*	*
316LS/316LVM	0.8200	0.7800	0.8200	*	*	*
317L	0.8075	0.6610	0.6683	0.7703	*	*
321	0.5520	0.4478	0.4613	0.5175	*	*
347	0.8195	0.7153	0.7288	0.7850	*	*
409/409 Mod	0.2428	0.1861	0.1861	0.1900	*	*
410/410S	0.2530	0.1923	0.1923	0.1962	*	*
430	0.3127	0.2282	0.2282	0.2319	*	*
434	0.3606	0.2676	0.2653	0.2776	*	*
439	0.3256	0.2358	0.2358	0.2394	*	*
440A	0.3127	0.2282	0.2282	0.2319	*	*
2205	0.7215	0.5632	0.5622	0.6308	*	*
263	5.0868	6.4771	6.5417	6.3011	6.4416	6.9385
276	3.6396	3.6576	3.5368	3.2610	2.9147	3.0924
A286	1.0519	1.0079	0.9355	0.8605	0.7448	0.8173
330	1.3174	1.2315	1.1241	1.0275	0.8905	0.9940
400	2.2196	2.0685	1.8568	1.6642	1.6041	1.8355
455	0.4900	0.4800	0.5000	*	*	*
465	0.5600	0.5400	0.5700	*	*	*
600	2.4507	2.2798	2.0593	1.8577	1.6881	1.9040
601	2.2298	2.0773	1.8962	1.7311	1.5343	1.7112
617	3.6710	5.0783	5.0335	4.7794	4.6961	5.0551
625	4.3166	4.2492	4.1002	3.8758	3.5821	3.7601
718	4.3175	4.2214	4.0784	3.9151	3.7080	3.8595
X-750	3.0110	2.8433	2.6288	2.4328	2.2612	2.4711
825	1.7838	1.7143	1.6064	1.4758	1.2810	1.3987
HX	2.4689	2.4709	2.3634	2.1712	1.9096	2.0604
188	11.4400	11.9500	12.5300	*	*	*
CCM	20.1100	21.3000	21.9800	*	*	*
L-605	14.1700	14.8600	15.5700	*	*	*

*Surcharge currently not available

Tesla's Gigafactory is Already Dominating EV Battery Production

When you think of an electric car, what vehicle comes to mind? Five years ago, answer may have been the Toyota Prius or Honda Insight, but today, the pièce de résistance of the battery powered car world is Tesla. Being one of the best selling electric car manufacturers isn't always just cut and dry—you need the production to back that up. This is where Tesla's Gigafactory comes in, an overly ambitious project which is now responsible for producing the most electric car batteries in the entire world.



The Nevada-based plant is set to become the largest building by overall square-foot area. Currently, only around 30% of the building is finished, occupying 1.9 million square feet per level. In its footprint, Tesla will bring more capacity for stored energy that we currently have a use for. Though still under construction, Tesla currently manufactures a great deal of its batteries within the confines of its walls—including the batteries used for Tesla's Powerpack and Powerwall, as well as Tesla's newest addition to its fleet: The Model 3.

In a conference call with Goldman Sachs, Tesla CEO Elon Musk confirmed that Tesla is currently producing more battery capacity in its unfinished factory than any one single plant elsewhere in the world, according to *Electrek*. This huge accomplishment is occurring in only one of its proposed plants, meaning that as the company grows and continues to build additional Gigafactories, it will produce even more storage solutions to increase the limit exponentially.

Currently, Tesla is producing its new 2170 battery cell in the Gigafactory. This cell will be used in the Model 3 as an alternative to the 18650 cells found in the Model S and Model X. Musk has previously stated that the shotgun shell sized is not only the best (most efficient?), but is also the cheapest cell to be produced, undercutting the competition. As of now, the cost to produce the 2170 cells are slightly higher, but as production and demand for the Model 3 grows, the cost will be greatly reduced. It is unclear if Tesla plans to utilize its batteries just for itself, or if it plans to scale its capacity to also become an OEM supplier of batteries. Regardless of future plans, Tesla has already accomplished affordable and efficient production of lithium ion based storage, something which may be short-lived. Tesla might want to begin looking into taking a page from the books of Toyota and Fisker to begin research on a graphene-based solid state battery. *Source: The Drive*

Equinox to Install Largest Deployment of Fuel Cells for the Colocation Data Center Industry

Equinox, Inc. the global interconnection and data center company, announced the signing of a 15-year Power Purchase Agreement (PPA) between a subsidiary of Southern Company and Equinox in which Bloom Energy fuel cells will be installed at 12 International Business Exchange™ (IBX®) data centers in the U.S. The project will provide a total capacity of more than 37 megawatts of power with a phased installation that begins in late 2017 through 2019.



The new project will install fuel cells at seven Equinox IBX data centers in the Silicon Valley, three in the New York area, and two in the Los Angeles area. It builds on the pilot program at Equinox's Silicon Valley SV5 IBX data center that began in 2015. The investment is a key milestone in the Equinox corporate sustainability program which focuses on making a positive impact on the company's employees, the communities in

which it operates, and the environment. Once installed and operational, the Equinox fuel cell project will operate at world leading efficiency, providing power that is 20-45% cleaner than the equivalent utility provided natural gas powered generation. This project will relieve the day-to-day stress on local utility providers, helping to delay new utility generation and providing electricity directly where it is needed.

Bloom Energy fuel cells use a proprietary solid oxide technology to generate electricity through a clean electrochemical process using air and fuel and resulting in only water and a small amount of carbon dioxide as byproducts. SOx (sulfur oxides) and other harmful smog-forming particulate emissions are virtually eliminated with the use of Bloom Energy fuel cells.

Source: Cision PR Newswire